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EXAMINER

CORSARO, N

ART UNIT

PAPER NUMBER

2749

DATE MAILED:

09/26/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/317,802

Applicant(s)

Christopher R. Uhlik

Examiner

Nick Corsaro

Group Art Unit 2749



Responsive to communication(s) filed on	
☐ This action is FINAL .	·
Since this application is in condition for allowance except for formal matters, in accordance with the practice under Ex parte Quay/1835 C.D. 11; 453 O.G. 213.	as to the merits is closed
A shortened statutory period for response to this action is set to expire3month(s), or longer, from the mailing date of this communication. Failure to respond within the period for response application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under 37 CFR 1.136(a).	onse will cause the
Disposition of Claim	
	is/are pending in the applicat
Of the above, claim(s) is/are	
☐ Claim(s)	
☐ Claim(s)	
☐ Claims are subject to rest	triction or election requirement.
Application Papers	
∑ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	
☐ The drawing(s) filed on is/are objected to by the Examiner.	
☐ The proposed drawing correction, filed on is ☐ approved ☐ disa	approved.
☐ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119	•
☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).	
☐ All ☐Some* ☐Some of the CERTIFIED copies of the priority documents have been	
☐ received.	
☐ received in Application No. (Series Code/Serial Number)	
\square received in this national stage application from the International Bureau (PCT Rule 17	7.2(a)).
*Certified copies not received:	
☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).	
Attachment(s)	
Motice of References Cited, PTO-892	
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).	
☐ Interview Summary, PTO-413	
X Notice of Draftsperson's Patent Drawing Review, PTO-948	
☐ Notice of Informal Patent Application, PTO-152	
SEE OFFICE ACTION ON THE FOLLOWING PAGES	Δ.

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DETAILED ACTION

Claim Objections

1. Claim 28 objected to because of the following informalities: The claim begins with the phrase "The method of claim" but fails to include a reference numeral of a parent claim.

Appropriate correction is required. For purposes of examination the examiner will examine the claim as if it depends on claim 17.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-3, 5, 6, 15, 17, 20-22, 27, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Hisamura et al. (5,678,188).

Consider claim 1, Hisamura teaches an emergency telephone number recognition system for operating in a wireless communications system (see col. 1 lines 53-56, and col. 4 lines 41-55). Hisamura teaches the wireless communications system including a communication station and at least one subscriber unit for communicating with the communication station (see col. 3 lines 24-33). Hisamura teaches the communication station connected to a telephone system (see col. 3 lines 24-26, and col. 3 lines 36-43). Hisamura teaches the subscriber unit includes a

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telephone device for providing dialing signals; a subscriber unit transceiver for communicating with the communication station; an interface for interfacing the telephone device and the subscriber unit transceiver, wherein the interface further includes: a converter for converting the dialing signals into digital signals (see col. 3 lines 24-26, and col. 3 lines 44-63). Hisamura teaches the emergency telephone number recognition system comprising a processor including a recognition system for recognizing if an emergency telephone number is dialed by comparing the digital signals to at least one predefined sequence of digits representing an emergency telephone number (see col. 3 lines 64-67, col. 4 lines 1-5, and col. 4 lines 34-55). Hisamura teaches a priority channel requestor for requesting a priority channel assignment from a subscriber unit to the communication station when the telephone number recognition system recognizes an emergency telephone number being dialed at the subscriber unit (see col. 1 lines 64-67, col. 2 lines 1-9, col. 5 lines 19-38, and col. 5 lines 39-47).

Consider claim 15, Hisamura teaches a subscriber unit for communicating with a base station, the subscriber unit coupled to a telephone unit and comprising: a) a circuit for detecting whether or not the telephone unit is off-hook; b) a circuit for converting audio-band analog signals from the telephone into digital signals; c) a memory for storing an emergency phone number description; d) a signal processing mechanism capable of recognizing emergency telephone number by comparing any dialed digit sequence to the emergency phone number description stored in the memory; e) a channel requesting mechanism to request a wireless channel to the base station; f) a mechanism capable of notifying the base station that the

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requested call is of an emergency nature; and g) and a processing mechanism capable of continuing or discontinuing call progress based on the digit sequence detected (see col. 1 lines 53-56, and col. 4 lines 41-55, col. 3 lines 24-33, col. 3 lines 44-63, see col. 3 lines 64-67, col. 4 lines 1-5, and col. 4 lines 34-55, see col. 1 lines 64-67, col. 2 lines 1-21, col. 5 lines 1-9, col. 5 lines 19-38, and col. 5 lines 39-47).

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Consider claim 17, Hisamura teaches a method for discriminate between an emergency call and a non-emergency call by analyzing a digit sequence dialed at a particular subscriber unit of a wireless communication system which includes a communication station connected to a telephone system and one or more subscriber units, each subscriber unit capable of communicating with the communication station on a wireless channel, each subscriber unit including: a telephone device having an on-hook state and an off hook state, and a dialer enabling a user to sequentially dial one or more digits, the wireless communication system having a non emergency call capacity, the digit sequence dialed at the particular subscriber unit when the telephone device is in the off hook state, and emergency call being a call to one of a predefined set of emergency digit sequences, the method comprising: a) testing the dialed sequence to ascertain whether or not the dialed sequence corresponds to an emergency call; b) determining if the non emergency call capacity would be exceeded by placing an additional call from the subscriber unit, c) if the call capacity would not be exceeded, I) assigning a channel between the subscriber unit and the communication station, and ii) connecting the call to the telephone number corresponding to the dialed digit sequence, d) if the call capacity would be exceeded an

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if the testing step determines that the digit sequence is for an emergency call, I) degrading the data rate of one or more existing call to free capacity for an emergency call; ii) assigning a channel between the subscriber unit and the communication station, and iii) connecting the call to the telephone number corresponding to the dialed digit sequence (see col. 1 lines 53-56, and col. 4 lines 41-55, col. 3 lines 24-33, col. 3 lines 44-63, see col. 3 lines 64-67, col. 4 lines 1-5, and col. 4 lines 34-55, see col. 1 lines 64-67, col. 2 lines 1-21, col. 5 lines 1-9, col. 5 lines 19-38, and col. 5 lines 39-47).

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Consider claim 2, Hisamura teaches the processor further includes a look-up table comprising the at least one predefined sequence of digits representing an emergency telephone numbers (see col. 4 lines 40-55).

Consider claims 3 and 20, Hisamura teaches the digital signals represent the dialed digits for the dialed telephone number and the at least one predefined sequence of digits represents the dialed digits for an emergency telephone number (see col. 4 lines 56-67).

Consider claims 5, 21, and 22, Hisamura teaches the communication station includes a base station digital signal processor for responding to the priority channel request by degrading the data rate of one or more non emergency telephone calls and connecting the emergency caller if there are no available wireless communication channels between the communication channel and the subscriber unit for the emergency call (see col. 1 lines 64-67 and col. 2 lines 1-12).

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Consider claim 6, Hisamura teaches a mechanism that produces a try-later signal if all of the available channels are in use and the emergency telephone number recognition system does not recognize the digital signals as an emergency call (see col. 5 lines 1-10).

Consider claims 27, and 29, Hisamura teaches a circuit for detecting whether the telephone device is in an on-hook state or an off-hook state wherein the testing step is carried out a the subscriber unit after the circuit directs that the telephone device in the of hook state, and wherein the assigning step includes the subscriber unit notifying the communication station that the requested call is of an emergency nature (see col. 4 lines 40-55).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 4, 7-14, 16, 18, 19, 23-26, 28, and 30-34, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hisamura et al. (5,678,188) in view of LeBlanc et al. (5,596,625).

Consider claim 7, Hisamura teaches an emergency telephone number recognition system for operating in a wireless communications system, the wireless communications system including a communication station and at least one subscriber unit for communicating with the communication station, the communication station connected to a telephone system, the subscriber unit including: a telephone device for providing dialing signals; a subscriber unit

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transceiver for communicating with the communication station; an interface for interfacing the telephone device and the subscriber unit transceiver, wherein the interface further includes a converter for converting the dialing signals into digital signals, the emergency telephone number recognition system comprising: a processor including a recognition system for recognizing if an emergency telephone number is dialed by comparing the digital signals to at least one predefined sequence of digits representing an emergency telephone number; and a priority channel requestor for requesting a priority channel assignment from a subscriber unit to the communication station when the telephone number recognition system recognizes an emergency telephone number being dialed at the subscriber unit, the wireless communication system providing at least one communication channel, the wireless communication system connecting the subscriber unit to a communication station using the at least one communication channel; the communication station including a digital signal processor that includes: a number recognition system for recognizing when an emergency telephone number is dialed on the communication channel by comparing the digital signals to at least one sequence of digits representing an emergency telephone number (see col. 1 lines 53-56, and col. 4 lines 41-55, col. 3 lines 24-33, col. 3 lines, col. 3 lines 44-63, see col. 3 lines 64-67, col. 4 lines 1-5, and col. 4 lines 34-55, see col. 1 lines 64-67, col. 2 lines 1-21, col. 5 lines 1-9, col. 5 lines 19-38, and col. 5 lines 39-47). Hisamura does not teach the wireless communication system providing at least one reserve channel and at least one communication channel, the wireless communication system connecting the subscriber unit to a communication station using the at least one reserve channel; a number recognition system for

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recognizing when an emergency telephone number is dialed on the reserve channel by comparing the digital signals to at least one sequence of digits representing an emergency telephone number. LeBlanc teaches the wireless communication system providing a least one reserve channel and one communication channel, the wireless communication system connecting the subscriber unit to a communication station using the at least one reserve channel; a number recognition system for recognizing when an emergency telephone number is dialed on reserve channel by comparing the digital signals to at least one sequence of digits representing an emergency telephone number (see col. 1 lines 30-47, col. 2 lines 43-48, and col. 20 lines 25-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hisamura, and provide at least one reserve channel and at least one communication channel, the wireless communication system connecting the subscriber unit to a communication station using the at least one reserve channel; a number recognition system for recognizing when an emergency telephone number is dialed on reserve channel by comparing the digital signals to at least one sequence of digits representing an emergency telephone number, as taught by LeBlanc, thus allowing non-blocking during emergency call setup when control channels are busy.

Consider claim 4, Hisamura teaches sending the emergency number digitally (see col. 1 lines 8-11). Hisamura does not teach the digital signals represent the audio tones for the dialed telephone number and the at least one predefined sequence of numbers represents the audio tones for an emergency telephone number, however depending on the system DTMF control signaling can be used or direct digital signaling from a BCD key pad can be transferred, and it would have

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been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hisamura and use DTMF signaling to allow use of standardized key pad interfaces in the subscriber units.

Consider claim 8, Hisamura teaches the processor further includes a look-up table comprising the at least one predefined sequence of digits representing an emergency telephone numbers (see col. 4 lines 40-55).

Consider claim 9, Hisamura teaches the digital signals represent the dialed digits for the dialed telephone number and the at least one predefined sequence of digits represents the dialed digits for an emergency telephone number (see col. 4 lines 56-67).

Consider claim 10, Hisamura teaches sending the emergency number digitally (see col. 1 lines 8-11). Hisamura does not teach the digital signals represent the audio tones for the dialed telephone number and the at least one predefined sequence of numbers represents the audio tones for an emergency telephone number, however depending on the system DTMF control signaling can be used or direct digital signaling from a BCD key pad can be transferred, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hisamura and use DTMF signaling to allow use of standardized key pad interfaces in the subscriber units.

Consider claims 11, 18, 19, 23, 24, 25, and 26, Hisamura teaches the communication station includes a base station digital signal processor for responding to the priority channel request by degrading the data rate of one or more non emergency telephone calls and connecting

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the emergency caller if there are no available wireless communication channels between the communication channel and the subscriber unit for the emergency call (see col. 1 lines 64-67 and col. 2 lines 1-12).

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Consider claim 12, Hisamura teaches a mechanism that produces a try-later signal if all of the available channels are in use and the emergency telephone number recognition system does not recognize the digital signals as an emergency call (see col. 5 lines 1-10).

Consider claim 13, and 14, Hisamura does not teach the wireless system includes at least one reserve channel that operates at a lower data rate than the at least one communication channel. LeBlanc teaches the wireless system includes at least one reserve channel that operates at a lower data rate than the at least one communication channel (see col.1 lines 30-47). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hisamura, and include at least one reserve channel that operates at a lower data rate than the at least one communication channel, as taught by LeBlanc, thus allowing nonblocking during emergency call setup when control channels are busy.

Consider claim 16, Hisamura teaches the emergency number is compared with that in a register (see col. 4 lines 40-67). Hisamura does not teach a table enumeration, a regular expression, a procedural description, and a rule based description, however the indexing of the numbers can be based on direct correlation or an algorithm for the look up, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hisamura and provide a table enumeration, a regular expression, a procedural

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description, and a rule based description, thus allowing the numbers to be correlated with the proper emergency service.

Consider claim 28, Hisamura does not teach faking a dial tone at the subscriber station until dial digits are received, however in digital systems the dial-receive-ready state can be accomplished by proprietary indicators, or the digital phones can be made to act as the common analog phones by faking such analog features as dial tones, so that subscribers are presented with interfaces they are comfortable with, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hisamura and fake a dial tone at the subscriber unit, thus simulating the characteristics the subscribers are used to from PSTN telephone systems.

Consider claim 30, 31, and 34, Hisamura does not teach reserving a full rate channel for to enable the subscriber unit to transmit digit data. LeBlanc teaches reserving a full rate channel reserving a full rate channel for to enable the subscriber unit to transmit digit data (see col. 1 lines 33-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hisamura and reserve full rate channels, as taught by LeBlanc, thus allowing non blocking communication of the need for emergency access.

Consider claim 32 and 33, Hisamura teaches dropping a non-emergency call (see col. 2 lines 1-21).

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

(5,742,904) Pinder teaches an emergency call procedure.

(5,818,918) Fujii teaches emergency calls in PHS systems.

7. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Nick Corsaro whose telephone number is (703)306-5616. The examiner

can normally be reached on from 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Daniel Hunter, can be reached on (703) 308-6732. The fax phone number for the

organization where this application or proceeding is assigned is (703) 308-6306 or (703) 308-

6296.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-4700.

Nick Corsaro

DANIEL S'HUNTER

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2700